



ABSTRACT

A radiation receiving apparatus that comprises a pixel array and one or more microlenses located between the source of radiation and a less sensitive pixel in the pixel array. The arrangement of microlenses in a radiation receiving apparatus utilize a system architecture that recognizes that within a pixel array, there is typically a less sensitive pixel (i.e. one receiving light in the blue spectrum) and a more sensitive pixel (i.e. one receiving light in the red spectrum). A microlens is placed in physical proximity to the less sensitive pixel in order to decrease the inherent difference in sensitivity between the less sensitive pixel and the more sensitive pixel, in turn increasing the intensity of radiation incident upon the detecting area of the less sensitive pixel. The detecting area may include a photogate or a photodiode for sensing radiation.